

REMARKS:

The Examiner is thanked for the Office Action of May 23, 2002. In response thereto, applicant has amended claims 1 and 4-7. Applicant has canceled claims 2-3 without prejudice, and added new claims 13-15. No new matter has been added.

The present invention comprises a composite door assembly for a hollow core door including door skins which are formed from thermoplastic material, such as a polypropylene copolymer resin, high impact polystyrene, acrylonitrile-butadiene-styrene, acetal, nylon, polyester, polypropylene, polyethylene, polyvinyl chloride and acrylic. Additives, reinforcing fibers and/or fillers may be used in combination with the thermoplastic material. Additives may include UV stabilizer and pigment. Reinforcing fibers may include glass fiber strands, carbon fibers, and wood fiber. Fillers may include talc, calcium carbonate, and cellulose.

The examiner has rejected claim 7 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to specify if the percentages recited are by weight, or by volume. Applicant has amended claim 7 to clarify the claimed invention.

The examiner has rejected claim 1 as being anticipated by U.S. Patent No. 5,644,870 to Chen. The examiner has also rejected claims 1-7 as being obvious over the '870 patent to Chen in view of Sasaki et al., U.S. Patent No. 6,313,184, and Plummer et al., U.S. Patent No. 5,985,429. Applicant respectfully traverses these rejections.

Applicant has amended claim 1 to provide for a molded door skin for a hollow core door assembly formed from approximately 50 – 85% by weight polypropylene. The examiner states that Chen discloses a thermoplastic material to make a door skin, but also acknowledges that Chen fails to disclose the use of polypropylene to make a door skin.

Applicant has amended claim 1 accordingly, and respectfully asserts that the amended claim now distinguishes over Chen.

The examiner also states that Sasaki discloses molded articles made from copolymers of propylene, including a door panel and a door trim. However, Sasaki fails to disclose a polypropylene door skin for a hollow core door. Rather, Sasaki discloses molded articles used as automotive interior materials integrated with a skin material such as a dashboard, a console box, a console lid, an instrument panel, a door panel, a door trim, a ceiling material, an interior material for pillar portion, a sun visor, an arm rest, a head rest and the like. ('184 patent, column 10, lines 44-49). Thus, the molded articles are all directed to articles for the interior of an automobile. Obviously, the molded articles directed to automotive use are not comparable with a door skin for a hollow core door, given the size and shape of an automotive door panel is much different than a hollow core door skin. Applicant acknowledges that thermoplastics are used for some molded articles. However, special considerations and problems arise with the manufacture of thermoplastic door skins for hollow core doors. (See Specification, page 3, lines 5-10). Sasaki is not directed to such door skins. Therefore, Sasaki is not applicable to the present invention.

Likewise, Plummer fails to disclose a polypropylene door skin as claimed in the present invention. Rather, Plummer discloses composite thermoplastic materials used for making structural members, such as rails, jambs, stiles, sills, tracks, stop and sash, and some trim elements. ('429 patent, column 1, lines 26-30). Again, the size and shape of such articles are much different than a door skin for a door. The articles disclosed by Plummer are generally thicker, smaller components, and do not compare to a door skin

with regarding to molding processes. Therefore, Plummer is also inapplicable to the present invention. In light of the above, and in view of applicant's amendments, applicant respectfully requests that the examiner withdraw the rejections based on Chen, Sasaki and Plummer.

Wherefore, applicant asserts that the application is now in condition for allowance, and earnestly solicits same. It is believed that no fee is due with this submission. Should that determination be incorrect, then please debit Account No. 50-0548 and notify the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. C. Schrot', with a long horizontal flourish extending to the right.

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APPENDIX A: Marked Up Version of Claims with Underlining and Bracketing

1. A molded door skin for a hollow core door assembly, comprising [formed from]:
 - a. [a thermoplastic material] approximately fifty to eighty five percent by weight polypropylene.
4. The molded door skin as in Claim [3] 1, further comprising approximately ten to twenty percent by weight glass fibers.
5. The molded door skin as in Claim [2] 1, further comprising approximately sixty six percent by weight polypropylene and approximately fifteen percent by weight glass fiber.
6. [The] A molded door skin for a hollow core door assembly [as in Claim 1 wherein said thermoplastic material comprises] comprising:
 - a. approximately fifty to eighty five percent by weight high impact polystyrene.
7. The door skin as in Claim 6 comprising approximately eighty percent by weight polystyrene and approximately twenty percent by weight wood fiber.